UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/662,763	09/15/2003	Norman D. Staller	**BA-0341	1512

23377 7590 11/25/2008

WOODCOCK WASHBURN LLP
CIRA CENTRE, 12TH FLOOR
2929 ARCH STREET
PHILADELPHIA, PA 19104-2891

EXAMINER	
GEBRIEL, SELAM T	
ART UNIT	**PAPER NUMBER**
2622	

MAIL DATE	DELIVERY MODE
11/25/2008	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/662,763	STALLER, NORMAN D.	
	Examiner	Art Unit	
	SELAM T. GEBRIEL	2622	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *15 September 2003*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-30* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-30* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Response to Arguments

1. Applicant's arguments, see Remarks Page 8 – 1 4 , filed 03/26/2008, with respect to Claims 1 – 16 and newly added claims 17 – 30 have been fully considered and are persuasive. The previous rejections have been withdrawn.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claim 1, Lines 10 and 11 recites the limitation **"Said electronic image capture system".** There is insufficient antecedent basis for this limitation in the claims.

4. Claims 18, 19 and 22 Line 1 recites the limitation **"Said exposure system".** There is insufficient antecedent basis for this limitation in the claims.

5. Claims 20 Line 3 recites the limitation **"Said exposure system".** There is insufficient antecedent basis for this limitation in the claims.

6. Claim 18, Line 2 and claim 19, Line 2 recite the limitation "**Said flash unit**". There is insufficient antecedent basis for this limitation in the claims.

7. Claim 20, Line 4 and 6 recites the limitation "**Said flash unit".** There is insufficient antecedent basis for this limitation in the claims.

8. Claim 23, Line 1 recites the limitation "**Said flash unit**". There is insufficient antecedent basis for this limitation in the claims.

9. Claim 24, Line 9, 12, and 14 recites the limitation "**Said flash unit".** There is insufficient antecedent basis for this limitation in the claims.

10. Claim 27, Line 1 recites the limitation "**Said flash unit".** There is insufficient antecedent basis for this limitation in the claims.

11. Claim 30, Line 7 recites the limitation "**Said flash unit".** There is insufficient antecedent basis for this limitation in the claims.

Claim Rejections - 35 USC § 103

12. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

13. Claims 1 – 3 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shimizu (US 5,049,911) in view of Pizzuti (US 4,395,102).

14. Regarding claim 1, Shimizu disclose an electronic camera (Figure 1, Col 2 Line 51 - 53), comprising:

An electronic image capture device (CCD imaging device 10, Col 2 Line 57 - 58) adapted for capturing an image scene ;

A scanning aperture shutter (An aperture and shutter 14 having aperture blades and shutter blades, Col 2 Line 60 – 62 and Col 3 Line 1 – 10) located to control light energy received by said electronic image capture device from said image scene;

A photocell (Photosensor 16, Col 2 Line 63 – 64) adapted for sensing light energy received from said image scene; and

An exposure control system (Control unit 20, Col 3 Line 1 – 10) responsive to

said photocell (Photosensor 16) and operatively connected to said scanning aperture shutter (Aperture and shutter 14), Wherein said exposure control system is adapted to control said scanning aperture shutter (Col 3 Line 1 – 10) and

Shimizu doesn't explicitly disclose the exposure control system or the control unit 20 adapted to control a flash unit in response to sensed light energy at said photocell to control **a variable amount of fill flash** energy received by said electronic image capture system in relation to ambient light energy received by said electronic image capture system during image capture (Abstract and Col 5, Line 65 – 68 to Col 9, Line 1–48).

However Pizzuti disclose the exposure control system (Automatic exposure control system Col 7 Line 66) adapted to control a flash unit (Strobe unit 78 Col 7 Line 65) in response to sensed light energy at said photocell (Ambient scene brightness level and camera to scene distance Col 8 Line 3 – 5) to control a variable amount of fill flash energy (the strobe unit 78 is of the **variable output type** which is automatically fired and quenched) received by said electronic image capture system in relation to ambient light energy received by said electronic image capture system during image capture (Col 7 Line 65 – 68 to Col 8 Line 1 – 13).

Therefore it would have been obvious to one ordinary skilled in the art at the time the invention was made to modify the exposure control system of Shimizu as to control a flash unit in response to sensed light energy at said photocell to control a variable amount of fill flash energy received by said electronic image capture system in relation to ambient light energy received by said electronic image capture system during image

capture with an exposure system control system as taught in Pizzuti. The motivation to do so is that to illuminate the scene directly to soften dark shadows caused by downwardly directed light or to balance the illumination in scenes having high lighting contrasts, such as daylight photography where the primary subject is situated in a shadow.

15. Regarding claim 2, Shimizu in view of Pizzuti further discloses the camera of claim 1, wherein said exposure control system is adapted to illuminate said flash unit once a predetermined amount of ambient light energy is sensed by said photocell (Pizzuti disclose exposure control system adapted to automatically fire and quench at appropriate time during the course of an exposure cycle to provide primary scene lighting or auxiliary for fill flash exposures Col 7 Line 65 – 68 to Col 8 Line 1 – 13).

16. Regarding claim 3, Shimizu in view of Pizzuti further discloses the camera of claim 2, wherein said exposure control system is adapted to extinguish said flash unit once a predetermined amount of infrared spectrum energy is sensed by said photocell during flash unit illumination (Pizzuti, disclose exposure control system adapted to automatically fire and quench at appropriate time during the course of an exposure cycle to provide primary scene lighting or auxiliary for fill flash exposures Col 7 Line 65 – 68 to Col 8 Line 1 – 13).

17. Regarding claim 7, Shimizu in view of Pizzuti further discloses the camera of claim 1, wherein said flash unit is constructed integrally with said camera (Pizzuti, Strobe unit 78 Col 7 Line 65).

18. Claims 4 and 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shimizu (US 5,049,911) in view of Pizzuti (US 4,395,102) in further view of Farrington (US 4,941,011).

19. Regarding claim 4 Shimizu in view of Pizzuti disclose camera of claim 1 having a photocell.

Shimizu in view of Pizzuti does not explicitly discloses a photocell includes a visible spectrum photocell and an infrared spectrum photocell and further wherein, Said exposure control system is adapted to use said visible spectrum photocell to sense ambient light energy received from said image scene prior to illumination by said flash unit and to use said infrared photocell for sensing infrared spectrum energy received from said image scene during illumination by said flash unit

Farrington discloses a photocell (Figure 1, Element 32 and 28) includes a visible spectrum photocell (A visible light photodetector 30, Col 3,) and an infrared spectrum photocell (An infrared photodetector 26), and further wherein, Said exposure control system (Figure 1 Exposure Control Electronic Module 48) is adapted to use said visible spectrum photocell to sense ambient light energy received from said image scene prior to illumination by said flash unit and to use said infrared photocell for sensing infrared

spectrum energy received from said image scene during illumination by said flash unit (Farrington, Col 7, Line 35 – 53 and Col 6 Line 55 – 68 to Col 7 Line 1 - 12).

Therefore it would have been obvious to one ordinary skilled in art at the time the invention was made to modify the photocell and exposure control system of Shimizu and Pizzuti with the photocell and exposure control system as taught in Farrington where the photocell including a visible light photodetector 30 for sensing ambient light energy and an infrared photodetector 26 for sensing infrared light and wherein the exposure system uses said visible light photodetector 30 sense ambient light energy received from said image scene prior to illumination by said flash unit and to use said infrared photocell for sensing infrared spectrum energy received from said image scene during illumination by said flash unit. Therefore having separate photocells for shorter wave lengths (Visible Light) and for longer wavelength (infrared) and controlling the photocells accordingly would have the advantage of controlling duration of photographic exposure more effectively.

20. Regarding claim 5, Shimizu in view of Pizzuti in further view of Farrington disclose the camera of claim 4, wherein said scanning aperture shutter includes separate apertures for said image capture device, said visible spectrum photocell and said infrared spectrum photocell (Farrington, Col 3, Line 15—68 to Col 4, Line 1- 4 and See Figure 1 scanning aperture 18 includes for example opening 24 is for visible light sensor and 28 is for non visible sensor and the scanning aperture 18 also includes an aperture for image capturing device).

21. Claim 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shimizu (US 5,049,911) in view of Pizzuti (US 4,395,102) in further view of Omura (US 5,943,515).

22. Regarding claim 6, The camera of claim 1, Shimizu in view of Pizzuti disclose wherein said exposure control system is adapted to generate control signals for a flash unit (Pizzuti Col 7 Line 65 – 68 to Col 8 Line 1 – 13)

Shimizu in view of Pizzuti does not explicitly disclose the flash unit being a detachable flash unit.

Omura disclose a detachable flash unit (External flash unit Col 5 line 21 - 24)

Therefore it would have been obvious to one ordinary skilled in the art at the time invention was made to modify the flash unit of Shimizu and Pizzuti with an external or detachable flash unit as taught in Omura. The motivation to do so is that an external flash offers much more versatility and power than a fixed position, built-in flash. External flash units provide increased flash range, more control of light direction, faster recycle times and they virtually eliminate red eye.

23. Regarding claim 8, Claim 8 is rejected under claims 1 – 3.

24. Regarding claim 9, Claim 9 is rejected under claims 1, 4 and 5.

25. Regarding claim 10, Claim 10 is rejected under claims 1 – 4.

26. Regarding claim 11, Claim 11 is rejected under claims 1 – 3.

27. Regarding claim 12, the method of claim 12 is rejected under the apparatus of claims 1 and 2.

28. Regarding claim 13, the method of claim 13 is rejected under claim 12 the apparatus of claims 1 – 4.

29. Regarding claim 14, the method of claim 14 is rejected under claims12 and 13 the apparatus of claims 1 – 4.

30. Regarding claim 15, the method of claim 15 is rejected under claim 12 and apparatus of claims 1, 4 and 5.

31. Regarding claim 16, the method of claim 16 is rejected under the apparatus of claims 1 – 3.

32. Regarding claim 17, Claim 17 is rejected under claim 1.

For the independent claim 17 and for all its dependent claims, Image capturing means is equivalent to image capturing devices of claim 1. Light control means is equivalent to scanning aperture shutter of claim 1. Light sensing means is equivalent to photocell unit of claim 1. Exposure control means is equivalent to exposure control system of claim 1. Means for discharging a flash of light is equivalent to flash unit of claim 1.

33. Regarding claim 18, Claim 18 is rejected under claim 17 and claims 1 and 2.

34. Regarding claim 19, Claim 19 is rejected under claims 17 and 18 and claims 1 and 2.

35. Regarding claim 20, Claim 20 is rejected under claim 17 and claims 1, 2, and 4.

36. Regarding claim 21, Claim 21 is rejected under claims 17 and 20 and claims 1, 2, and 4.

37. Regarding claim 22, Claim 22 is rejected under claim 17 and claims 1 and 6.

38. Regarding claim 23, Claim 23 is rejected under claim 17 and claims 1 and 7.

39. Regarding claim 22, Claim 22 is rejected under claim 17 and claims 1 and 6.

40. Regarding claim 24, Claim 24 is rejected under claims 1 and 3.

For the independent claim 24 and for all its dependent claims, electronic image capturing means is equivalent to image capturing devices of claim 1. Light control means is equivalent to scanning aperture shutter of claim 1. Light sensing means is equivalent to photocell unit of claim 1. Exposure control means is equivalent to exposure control system of claim 1. Means for discharging a flash of light is equivalent to flash unit of claim 1.

41. Regarding claim 25, Claim 25 is rejected under claim 24 and claims 1 and 4.

42. Regarding claim 26, Claim 26 is rejected under claims 24 and 25 and claims 1, 4, and 5.

43. Regarding claim 27, Claim 27 is rejected under claim 24 and claims 1, 2, and 3.

44. Regarding claim 28, Claim 28 is rejected under claims 1.

For the independent claim 28, electronic image capturing means is equivalent to image capturing devices of claim 1. Light control means is equivalent to scanning aperture shutter of claim 1. Light sensing means is equivalent to photocell unit of claim 1. Exposure control means is equivalent to exposure control system of claim 1. Means for discharging a flash of light is equivalent to flash unit of claim 1.

45. Regarding claim 29, the method of claim 29 is rejected under the apparatus of claims 1, 2, and 3.

For the independent claim 29, electronic image capturing means is equivalent to image capturing devices of claim 1. Light control means is equivalent to scanning aperture shutter of claim 1. Light sensing means is equivalent to photocell unit of claim 1. Exposure control means is equivalent to exposure control system of claim 1. Means for discharging a flash of light is equivalent to flash unit of claim 1.

46. Regarding claim 30, Claim 30 is rejected under claims 1, 2, and 3.

For the independent claim 30, electronic image capturing means is equivalent to image capturing devices of claim 1. Light control means is equivalent to scanning aperture shutter of claim 1. Light sensing means is equivalent to photocell unit of claim 1. Exposure control means is equivalent to exposure control system of claim 1. Means for discharging a flash of light is equivalent to flash unit of claim 1.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to SELAM T. GEBRIEL whose telephone number is (571)270-1652. The examiner can normally be reached on Monday-Thursday 7.30am-5.00pm.If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tran Sinh can be reached on 571-272-7564. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300. Information regarding the status of an application may be obtained from the

Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Tuan V Ho/
Primary Examiner, Art Unit 2622
/S. T. G./
Examiner, Art Unit 2622

Thursday, November 20, 2008